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ASSIGNMENT BOOKLET 3B

SCN1285 Science 14

Module 3: Section 3 Assignment and Section 4 Assignment

FOR STUDENT USE ONLY

Date Assignment Submitted:

Time Spent on Assignment:

(If label is missing or incorrect)

Student File Number:

Module Number: _____

FOR OFFICE USE ONLY

Assigned

Teacher: _____

Assignment

Grading: _____

Graded by: _____

Date Assignment Received:

Student's Questions and Comments

Apply Module Label Here

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*Please verify that preprinted label is for
correct course and module.*

Teacher's Comments

Teacher

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- Are all the assignments completed? If not, explain why.
- Has your work been reread to ensure accuracy in spelling and details?
- Is the booklet cover filled out and the correct module label attached?

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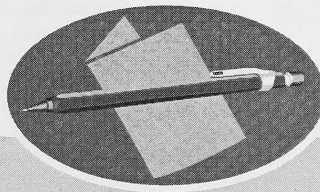
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Science 14

Module 3

From Life to Lifestyle

ASSIGNMENT BOOKLET 3B



**Learning
Technologies
Branch**

Alberta
LEARNING

FOR TEACHER'S USE ONLY

Summary

	Total Possible Marks	Your Mark
Section 3 Assignment	35	
Section 4 Assignment	45	
	80	

Teacher's Comments

Science 14
Module 3: From Life to Lifestyle
Assignment Booklet 3B
Section 3 Assignment and Section 4 Assignment
Learning Technologies Branch
ISBN 0-7741-2517-9

The Learning Technologies Branch acknowledges with appreciation the Alberta Distance Learning Centre and Pembina Hills Regional Division No. 7 for their review of this Assignment Booklet.

This document is intended for	
Students	✓
Teachers	✓
Administrators	
Home Instructors	
General Public	
Other	



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- Alberta Learning, <http://www.learning.gov.ab.ca>
- Learning Technologies Branch, <http://www.learning.gov.ab.ca/lrb>
- Learning Resources Centre, <http://www.lrc.learning.gov.ab.ca>

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ASSIGNMENT BOOKLET 3B

SCIENCE 14: MODULE 3

SECTION 3 ASSIGNMENT AND SECTION 4 ASSIGNMENT

Your mark for this module will be determined in part by how well you do your assignments.

This Assignment Booklet is worth 80 marks out of the total 175 marks for the assignments in Module 1. The value of each assignment and each question is stated in the left margin.

Work slowly and carefully. If you have difficulty, go back and review the appropriate topic.

Be sure to proofread your answers carefully.

35

Section 3 Assignment: Food for Life

Read all parts of your assignment carefully and record your answers in the appropriate places.

1. Complete the following statements regarding testing for nutrients.

1

a. The brown paper test is a test for _____.

1

b. Biuret solution turns _____ when a protein is present.

1

c. Iodine turns blue-black when _____ is present.

1

d. Benedict's solution is used to test for _____.

2. Write the name of the food source from the following list beside the appropriate nutrient.

- | | |
|----------------|--------------|
| • orange juice | • butter |
| • pasta | • dried peas |

1

a. **fat:** _____

1

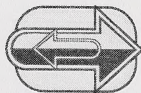
b. **protein:** _____

1

c. **vitamin C:** _____

1

d. **carbohydrate:** _____



Return to page 51 of the Student Module Booklet and begin Lesson 2.

- ① 3. The categories of information that food labels provide are advertising, preparation directions, and _____.
4. Analyze the label from a can of peas. List the nutrients, serving size, and daily value of this can of peas.

NUTRITION INFORMATION INFORMATION NUTRITIONNELLE	
PER 125 mL (1/2 CUP) SERVING 3 SERVINGS PER CAN	
PAR PORTION DE 125mL (1/2 TASSE) 3 PORTIONS PAR BOITE	
ENERGY/ÉNERGIE	14 Cal/60 kJ
PROTEIN/PROTEINES	0.8 g
FAT/MATIÈRES GRASSES	0.1 g
CARBOHYDRATE/GLUCIDES	3.2 g
SUGARS/SUCRES	1.5 g
STARCH/AMIDON	0.5 g
DIETARY FIBRE/FIBRES ALIMENTAIRES	1.2 g
SODIUM	181 mg
POTASSIUM	78 mg

② **Nutrients:** _____

① **Serving size:** _____

① **Daily value:** _____

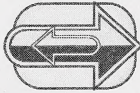
① 5. Is this food item healthy in terms of fat content? Why?

2

6. Why is it important that manufacturers put the nutritional values on foods?

2

7. State one health benefit and one drawback of a vegetarian diet.



Return to page 56 of the Student Module Booklet and begin Lesson 3.

Read question 8 carefully. Decide which of the choices BEST answers the question. Place your answer in the blank space given.

1

- _____ 8. Proteins are first broken down by enzymes in which part of the digestive system?

- A. mouth
- B. esophagus
- C. stomach
- D. liver

9. Fill in the blanks using the terms in the following list. A term may be used more than once. Some terms may not need to be used.

- | | | |
|-------------------|-------------------|----------------|
| • large intestine | • fats | • stomach |
| • pancreas | • liver | • gall bladder |
| • mouth | • small intestine | • esophagus |

2

- a. The two parts of your digestive system that are involved in mechanical digestion are the _____ and the _____.

1

- b. Water, minerals, and vitamins are absorbed into the bloodstream in the _____.

_____.

② c. Enzymes secreted by the _____ neutralize the gastric juices in the _____.

① d. Bile is a fluid secreted by the liver to break down _____.



Return to page 59 of the Student Module Booklet and begin Lesson 4.

For questions 10 to 12, read each question carefully. Decide which of the choices BEST completes the statement or answers the question. Place your answer in the blank space given.

① _____ 10. Fatigue and lack of energy can be caused by eating too much

- A. fat
- B. sugar
- C. protein
- D. carbohydrate

① _____ 11. Low blood sugar levels can be caused by

- A. over eating
- B. skipping meals
- C. not drinking water
- D. eating too many carbohydrates

① _____ 12. Which of the following are two foods that contain a lot of carbohydrates?

- A. bread and nuts
- B. meat and rice
- C. pasta and fish
- D. cereal and rice

13. State whether each statement is true (T) or false (F). Write your answer in the blank space given.

① _____ a. Whole grains are an excellent source of carbohydrates.

① _____ b. You should not eat any fats.

① _____ c. A vegetarian diet has no health benefits.

① _____ d. You lose water from your body every day.

① _____ e. Carbohydrates are not fattening.

① _____ f. You cannot obtain water from soups and juices.

- ① 14. Why are eggs and milk products considered to be meat alternatives?



Return to page 62 of the Student Module Booklet and begin the Section 3 Review.

45

Section 4 Assignment: Maintaining Homeostasis

Read all parts of your assignment carefully and record your answers in the appropriate places.

For questions 1 to 3, read the question carefully. Decide which of the choices BEST answers the question. Place your answer in the blank space given.

- ① _____ 1. Which term refers to maintaining an internal balance?

A. homeostasis
B. insulin
C. glucose
D. stress

- ① _____ 2. Which hormone regulates the amount of glucose in the blood?

A. glucose
B. adrenelin
C. bile
D. insulin

- ① _____ 3. How does temperature affect the heart rate of daphnia?

A. The heart rate increases with lower temperature.
B. The heart rate decreases with higher temperature.
C. The heart rate increases with higher temperature.
D. The heart rate remains the same with changes in temperature.

- ② 4. Describe how insulin helps the body maintain its internal balance.

- ② 5. How does the body change waste product levels to maintain an internal balance?

3

6. What effect does a hot day have on your heart rate? How does this help your body maintain its internal balance?



Return to page 68 of the Student Module Booklet and begin Lesson 2.

For questions 7 to 10, read each question carefully. Decide which of the choices BEST completes the statement or answers the question. Place your answer in the blank space given.

1

- _____ 7. Which lifestyle change will lower high blood pressure?

A. decreasing exercise
B. eating more salty food
C. losing weight
D. smoking

1

- _____ 8. Which is an effect of not enough exercise?

A. becoming overweight
B. constricting blood vessels
C. increasing joint disorders, such as arthritis
D. increasing heart rate

1

- _____ 9. The term *homeostasis* refers to

A. a lack of exercise
B. the flow of blood to the organs and tissues
C. the internal balance maintained in the body
D. a decrease in the amount of oxygen available to the heart

1

- _____ 10. Foods high in cholesterol and fats will

A. clog your arteries
B. increase your blood pressure over time
C. make it harder for your heart to pump blood through the circulatory system
D. all of the above

11. State whether each statement is true (T) or false (F). Place your answer in the blank space given.

①

_____ a. Foods, like hamburgers and French fries cause fatty deposits that can clog the arteries.

①

_____ b. Arteries narrowed by fatty deposits make it harder for the heart to pump blood through the circulatory system.

①

_____ c. Eating fatty foods will eventually cause high blood pressure.



Return to page 75 of the Student Module Booklet and begin Lesson 3.

12. State whether each statement is true (T) or false (F). Place your answer in the blank space given.

①

_____ a. People who suffer from anorexia nervosa eat too little.

①

_____ b. People who suffer from anorexia nervosa never exercise.

①

_____ c. People with bulimia eat too little.

①

_____ d. Vomiting too often can damage the esophagus and teeth.

①

_____ e. Anorexia nervosa is called the “binge and purge” disease.

①

_____ f. People who suffer from anorexia think they are overweight.

②

13. How does a healthy person’s body respond to sugar entering the blood?

③

14. How does a diabetic’s body respond to sugar entering the blood?

- ③ 15. Name three things people can do to lower their risk of having a heart attack.

- ① 16. A high level of _____ in your urine could show that you have diabetes.

17. Suppose your body filtered 340 g of chloride ions out of the bloodstream and then returned 332 g to the bloodstream.

- ① a. How much of the chloride ions would there be in the urine?

- ② b. Determine the percent of chloride ions returned to the bloodstream.



Return to page 79 of the Student Module Booklet and begin Lesson 4.

For questions 18 and 19, read each question carefully. Decide which of the choices BEST answers the question. Place your answer in the blank space given.

- ① _____ 18. Which instrument is designed to deliver insulin to the body at regular intervals?

A. endoscope
B. insulin pump
C. insulin monitor
D. insulin level

- ① _____ 19. Which instrument is used to view the lower digestive tract?

A. endoscope
B. pacemaker
C. colonoscopy
D. angiogram

20. Match a term from the following list with each statement. Place your answer in the blank space given.

- | | | |
|--------------------|---------------------|--------------------|
| i. kidney dialysis | iv. colonoscopy | vii. endoscope |
| ii. angiogram | v. heart transplant | viii. Jarvik-7 |
| iii. pacemaker | vi. angioplasty | ix. cardiac arrest |

①

_____ a. an electrical device that stimulates the heart to give it a steady heartbeat

①

_____ b. a procedure used to clear a blocked artery

①

_____ c. a procedure that first took place in 1967

①

_____ d. an X ray that will show irregularities in blood flow

①

_____ e. a procedure that allows blood to flow into a machine that removes the waste products and then back into the body

①

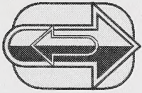
_____ f. a device that replaces the human heart

①

_____ g. a procedure used to check for abnormalities, cancer, inflammation, or bleeding in the large intestine or rectum

①

21. When is a pacemaker required?



Submit your completed Assignment Booklet 3B to your teacher for assessment.
Then return to page 81 of the Student Module Booklet and begin the Section 4 Review.

